



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/941,542

08/29/2001

Noman F. Kane

60158-143

7036

26096

7590

04/08/2004

CARLSON, GASKEY & OLDS, P.C.
400 WEST MAPLE ROAD
SUITE 350
BIRMINGHAM, MI 48009

EXAMINER

NGUYEN, THUKHANH T

ART UNIT

PAPER NUMBER

1722

DATE MAILED: 04/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/941,542

Applicant(s)

KANE, NOMAN F.

Examiner

Thu Khanh T. Nguyen

Art Unit

1722

eb

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-26 is/are pending in the application.
- 4a) Of the above claim(s) 15-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-14, 25-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3-14 and 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over the German reference (39 39 352) in view of the admitted prior art or over the admitted prior art in view of the German reference ('352).

The German reference discloses a forming tool for bending a plastic tube, comprising a forming channel (2) having a curved cross-section and an interior dimension (9), a topmost mouth (18) is narrower than the tube outer diameter to keep the tube snap-fits inside the forming channel (see abstract), wherein the tube (4) is having a flexed dimension (14) when the tube is passing through the topmost mouth and a non-flexed dimension (15) before and after the tube is positioned into the forming channel, wherein the forming channel contact approximately 180°-210° of the tube (Fig. 4, abstract), wherein the forming channel includes at least one curved track, and one straight track (Fig. 1, 6-8). The German reference, however, fails to disclose a pair of opposing flanges curved away from the forming channel.

The admitted prior art disclose a square forming track having a pair of opposing flanges (20) curved away from the forming channel (18), a pair of securing feature (24) located at the topmost position of the forming channel to keep the forming pipe inside the

track. The admitted prior art fails to disclose a curved cross section forming channel contacting approximately 180° of the pipe.

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to modify the German reference by providing a pair of opposing flanges curved away from the forming channel as taught by the admitted prior art in order to facilitate the handling of the forming tool during the insertion or removal of the pipe from the forming channel.

It would also have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to modify the admitted prior art by providing a curved cross section forming channel as taught by the German in order to provide more contact surface between the forming tool and the tube to expedite the forming process and to eliminate the deformation of the tube.

Response to Arguments

3. Applicant's arguments with respect to claims 1, 3-14 have been considered but are moot in view of the new ground(s) of rejection.

The German reference disclose a forming tool for bending a flexible tube in which the diameter of the tube is changing as it moves across the upper mouth of the forming channel, and the forming channel having a circular cross section, which surrounds about 180°-210° of the tube. This forming tool eliminates the use of gripping device and means for closing or opening the tool.

The admitted prior art disclose a pair of flanges to facilitate the handling of the tool.

Art Unit: 1722

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The Japan references (59-169835; 02-32831; 09-164586; 11-90992) disclose a plurality of tube bending devices having forming tracks with curved cross section forming channels.

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thu Khanh T. Nguyen whose telephone number is 571-272-1136. The examiner can normally be reached on Monday- Friday, 6:30-4:00.

Art Unit: 1722

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda L Walker can be reached on 571-272-1151. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TN


ROBERT DAVIS
PRIMARY EXAMINER
GROUP 1300 1700

4/5/4